

REMARKS

The Official Action of October 28, 2008, and the prior art cited and relied upon therein have been carefully studied. The claims in the application are now claims 2-4 and 6-20, and these claims define patentable subject matter warranting their allowance. Favorable reconsideration and such allowance are respectfully urged.

Claim 1 has been cancelled and new claims 18-20 added. Claims 2-4 and 6-20 remain in the application for consideration.

In response to the Examiner's rejection of claim 6 under 35 U.S.C. §112, second paragraph, Applicant has amended claim 6 to eliminate the problem identified by the Examiner. Applicant respectfully submits that this rejection has now been overcome.

The Examiner has further rejected claims 1-4, 6-8 and 12 under 35 U.S.C. §103(a) as being unpatentable over Sutcliffe '413 in view of Huebner '676; claims 9-10 under 35 U.S.C. §103(a) as being unpatentable over Sutcliffe and Huebner further in view of Kirschman '006 and Lowery '399; claim 11 under 35 U.S.C. §103(a) as being unpatentable over Sutcliffe and Huebner further in view of Lawson '423; and claims 13-14 and 16-17 under 35 U.S.C. §103(a) as being unpatentable over Sutcliffe and Huebner further in view of Karpf '166 and Lowery '399. Applicant respectfully traverses all of these rejections as applied to new claims 19-20 and claims 2-4 and 6-17 as amended.

As the Examiner will note, new claim 18 has been drafted to more explicitly set out the structural features of the claimed intervertebral implant. In comparison, the center element 1 of Sutcliffe which the Examiner maintains is equivalent to the intervertebral implant previously claimed is a complex multi-element component that has no structural resemblance to that claimed. In that regard, Applicant notes that Sutcliffe's center element 1 has upper and lower external threads 3 on which circular elements 2 which have a diameter greater than

center element 1 are engaged. Further, elements 1 and 2 are formed with a plurality of recesses or holes over their entire surface.

In comparison, new independent claim 18 provides that its intervertebral implant "is formed as a unit" which has "only a single recess therein that extends through the implant to open on opposite sides of the implant". This results in the recess facing along the longitudinal axis of the spiral column when implanted.

Further, new claims 19 and 20 respectively provide that both upper sides of the intervertebral implant and the opposite sides are at least partially flat.

Clearly, the Sutcliffe implant is not formed as a unit, has a plurality of "recesses", none of which are equivalent to that claimed, and has no partially flat upper and opposite sides, as claimed. Given these significant structural differences, it is clear that center element 1 of Sutcliffe cannot serve the same purpose as the implant claimed.

Applicant has further amended claim 13 to more specifically define over the cited prior art.

As stated in the Office Action, Sutcliffe and Huebner do not specifically disclose the kit set out in claim 13. Karpf discloses an implant kit for stabilizing regions of the spine. This kit employs a plurality of fixing bands which are at least similar to one another and stabilizing elements which are adapted to be secured to the bands. The fixing bands have each two bores for receiving a fixing element to secure the bands to a spondyle. The kit does not include intervertebral implants, as the bands are only connected to the spondyle and not to an intervertebral implant. Karpf does not disclose plates which are Z-shaped.

Neither Sutcliffe nor Huebner disclose or suggest use of a plate that is Z-shaped for connecting an intervertebral implant to a vertebra. While Lowery discloses an

interior plating system which includes a Z-shaped plate connected to vertebrae, it does not connect an implant to a vertebra.

In the Office Action it is stated that it would be obvious to one having ordinary skill in the art, at the time the invention was made, to modify at least one of the plates, in particular the back side of the plate which engages the vertebra (Fig. 9) of Sutcliffe to be Z-shaped as taught by Lowry, because the Z-shaped profile allows for a reduced incursion into surrounding tissue. Applicant does not agree. The kit according to the present invention comprises at least a Z-shaped plate for connecting an intervertebral implant to at least one vertebra. The Z-shaped plate as disclosed by Lowery could clearly not be used to connect the implant as disclosed by Sutcliffe to a vertebra. The plate 8 as disclosed by Sutcliffe needs an accurate short leg to attach it to the intervertebral implant.

Sutcliffe as well as Lowery do not provide a suggestion or motivation to combine the elements disclosed to have a kit according to the present invention. The kit according to the present application enables different fixation systems and at least a system, wherein the two intervertebral implants are connected to each other using the Z-shaped plate and wherein these two implants are connected to at least one vertebrae using the L-shaped plate. As the connection to the intervertebral implants as well to the vertebra use ball joints, the orientation of the plates can be varied to adapt the system in three dimensions to the anatomical variations existing between individuals. This is clearly not possible with the systems as disclosed in the prior art.

Applicant respectfully submits that the claimed invention patentably defines over the cited prior art based on at least the significant structural differences identified above.

Appln. No. 10/554,062
Amdt. dated April 28, 2009
Reply to Office Action of October 28, 2008


The prior art documents made of record and not relied upon have been noted along with the implication that such documents are deemed by the PTO to be insufficiently pertinent to warrant their applications against any of applicant's claims.

Favorable reconsideration and allowance are earnestly solicited.

Respectfully submitted,

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